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> School Survey Dayton, Ohio

Over-age and Progress

### STATE NORMAL SCHOOL LOS ANGELES. CALIFORNIA

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BTATE WORMA'L SCHOOL

## OVER-AGE AND PROGRESS

IN THE

# Public Schools of Dayton



### **OVER-AGE AND PROGRESS**

IN THE 27720

# Public Schools of Dayton



MADE IN CO-OPERATION WITH THE
Ohio State School Survey Commission

BY THE

Bureau of Municipal Research
DAYTON, OHIO

Mr. E. J. Brown, Supt. Dayton, Ohio.

My Dear Mr. Brown:

Enclosed is a copy of the study in over-age and progress in the Dayton schools, which was made in co-operation with the Ohio State School Survey Commission.

The facts have been used to support a number of recommendations, although a part of the suggestions are already in operation in Dayton.

I believe that you will be interested in the data, relative to over-age, progress and corellated facts. Of even more value, perhaps, would be a comparison with the conditions of the present year. Should you desire to make a similar study, I should be glad to place such means as we have at your disposal.

I want to thank you for the co-operation you have given in this investigation, and express my appreciation of the interest which has been shown by the teachers upon whom the labor largely devolved.

Very truly yours,

(Signed) L. D. UPSON,
Director.

April 2, 1914.

Mr. L. D. Upson,
Director of Municipal Research,
Dayton, Ohio.

My Dear Mr. Upson:

I write to thank you for the report of the over-age and progress study made by your Bureau in our schools. The report contains much data of value to us and the recommendations, several of which, as you suggest, are already in operation in Dayton, present matters for careful, thoughtful consideration.

Your offer to give the assistance of the Bureau of Municipal Research for another over-age and progress survey of our schools, is gratefully received. I am sure the work will have the continued cordial cooperation of our teachers and school officers, if you decide to make another efficiency survey.

Personally, I thank you for the helpful service you have rendered, for your uniform courtesy, and for your appreciation of the good work of our schools, shown by your words of commendation at various times.

Very truly yours,

(Signed) E. J. BROWN.

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### **FOREWORD**



N ORDER to furnish a basis for possible improvements in the Dayton schools, the Bureau of Municipal Research at the request and under the

direction of the Ohio State School Survey Commission, and in co-operation with the superintendent of schools, E. J. Brown, made an "over-age and progress" study for the years 1912-'13.

The information contained in this report though insufficient in itself to warrant absolute deductions concerning these problems, is adequate to indicate tendencies and as a guide for further and more thorough investigation of the problems uncovered by this survey.

Conclusions drawn throughout the report are based upon the assumption that the year 1912-'13 was a typical year, portraying conditions as they existed in past years.

Especial thanks are due Dr. Horace L. Brittain, director of the Ohio State School Survey; Mr. E. J. Brown, superintendent of instruction in Dayton; and to the school teachers of the city, for their courtesy and cooperation.

The collection and tabulation of the data, and the writing of the report was done by Mr. Arch Mandel, assisted by Miss Irene Dilks of the Bureau.

L. D. UPSON,
Director.

### How Survey Was Conducted

The data in this report was compiled from information furnished by the teachers upon special tabulation sheets devised by the Ohio State School Survey Commission.

All children enrolled in the normal elementary grades during the last year were accounted for, except those who died or were transferred to other schools. In this latter case they were counted once. The kindergarten, high schools and special classes were not included.

The ages of the children were taken as of September 1, 1912. Overage was determined by employing the following age-grade standards:

First Grade6			yrs.
Second Grade 7	4.6	8	6.6
Third Grade8	6.6	9	4.6
Fourth Grade9	4.6	10	6.6
Fifth Grade10	4.4	11	4.6
Sixth Grade11	4.4	12	4.6
Seventh Grade12			4.6
Eighth Grade13			4.6

A child is considered as being of normal age for Grade I. until it has reached its seventh birthday, after which time it is over age for the grade; for Grade II. a child is of normal age from its seventh birthday up to its eighth. On the eighth birthday, if still in Grade II., it is over age. This method is followed through all the grades.

Separate tabulations were made for the five upper grades of the Patterson school because it is the only school in Dayton where promotions occur semi-annually. It was felt that comparison with the other schools of the city would prove interesting.

### Summary of Findings

#### OVER-AGE

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42% of all the children in the elementary schools are older than the Normal Age for their grades; 45% are of Normal Age; 13% are younger than normal for their grade

The rate of over-age pupils increases from 29% in Grade I. to 52% in Grade V., then drops to 42% in Grade VIII.

Normal age pupils decrease from 58% in Grade I. to 35% in Grade V., then increase again to 44% in Grade VIII.

29% of the pupils in Grade I. are above Normal Age, and altho overage pupils tend to drop out in Grades VI. and VII., yet 42% of the children in Grade VIII. are overage.

Entrance of pupil to Grade I. in the middle of the year is not encouraged

A greater degree and a larger percentage of over-age exists in Grade V. than in any other Grade

1281 or 26% of the over-age children are from one to two years behind the grade and 791 or 16% are more than two years over-age, the remainder are less than one year over-age.

#### PROGRESS

91% of the pupils have made normal progress in their grades last year; 7% have been in their grades longer than the normal period; the remaining 2% were in their grades less than one year

Grade I. has the highest percentage of pupils making slow progress; Grade VII. the lowest

A higher rate of "Normal Progress" exists in Grades VI., VII. and VIII. than in the lower grades

There is a marked tendency in failing, to fail for a whole year rather than for a part of a year. For example, 14% of the slow pupils are one and one-half years or less but over one year in the grade; 43% are two years or less, but over one and one-half years; 4% are two and one-half years or less, but over two years; 36%, three years or less, but over two and one-half; 3% over three years.

#### PROMOTION AND NON-PROMOTION

The promotion rate for all grades is 85%; non-promotion 7%; elimination 8%

Grade I. has the lowest rate of promotion (75%) and the highest of non-promotion (14%)

The comparatively low promotion rate in Grade I. is probably caused by:

- a Non-promotion of 22% of "Under Normal Age" pupils
- b Non-promotion of 21% of pupils absent over 25 half days for the half year
- c High rate 35% of over-sized classes, the non-promotion rate in these being 15%

Grade VIII. has the highest rate of promotion (91%) and the lowest of non-promotion (1%)

The high rate of promotion in Grade VIII. is probably due to the fact that the fittest survive the whole school course

For every grade except Grade I, the rate of non-promotion in the "Older than Normal" group is higher than the rate in either of the other age groups

In all grades the rate of promotion is lowest for pupils who have been in the grade less than the normal length of time. The rate of promotion is lowest and non-promotion highest for pupils who have been absent more than 25 half days for the half year

Promotion rates are lowest and non-promotion highest in classes having over 50 pupils

#### DROPPING OUT—ELIMINATION

8% of the pupils dropped out of school from September, 1912, to June, 1913. The rate for Grade I. is 11%—the highest rate of all the Grades

61% of the pupils eliminated dropped out in Grades I.-IV.; 39% in Grades V.-VIII. The high mortality rate in the lower grades was caused by the temporary dropping out of children after the flood of March, 1913. These children returned to the schools in September at the beginning of the next school year. In all grades the rate of dropping out is highest for pupils in the "Older than Normal" group

In all grades the rate of elimination is highest among pupils who have spent less than the "Normal Time" in their grades; 66% of such pupils dropped out. The elimination rate is also heaviest for pupils who have been absent more than 25 half days for the half year

#### NATURE OF FAILURES

In Grade I., 100% of pupils failing are deficient in language

In all the Grades except Grades I. and II., mathematics causes from 100 to 150% more failures than either language or the informational subjects

The "Younger than Normal" children lead in language failures; the "Older than Normal" lead in mathematics and "informational" failures

#### NUMBER AND SIZE OF CLASSES

57% of the classes contain under 40 pupils; 32% have from 40 to 50; 11% over 50 pupils

Grade I. has the lowest rate (30%) of small sized classes and the highest rate (35%) of classes "over 50." The high rate of failing in the grade is due in part to this condition

Promotion rates are lowest in the "over 50" classes

Pupils are not classified according to age or ability

61% of the pupils completing Grade VIII. are of the normal age or younger

#### PATTERSON SCHOOL

Promotions in this school are made semi-annually

Compared to the other schools the rates in the three age groups are:

	Under Normal	Normal	Over Norma
Patterson School	40%	21%	39%
Other Schools		45%	42%

The degree of overage is less marked in this school than in the other schools

Over 95% of the pupils made normal progress; this is 4% higher than in the other schools

Promotion rates are higher for the five upper grades of the Patterson school than for the same grades in the other schools; non-promotion lower

In the first half of Grade VIII. the rate of promotion drops to 76%; 24% dropped out; the non-promotion rate is zero

#### Recommendations

That an age study be made at the beginning of every school year for purposes of classifying pupils properly

That an over-age and progress study be made at the close of every school year.

Wherever possible pupils be classified according to age and ability

That the nature of the failures be investigated in order that special attention may be given whenever necessary to the subjects in which the rates of failure are high

That the environment of pupils in different schools be investigated—social and economic

That the course of study be sufficiently flexible to conform to the needs of various groups of children

That special practical courses be arranged for pupils who are marking time until reaching the legal working age

That the causes for the dropping out of pupils be noted, and measures taken to diminish them if preventable

That semi-annual promotions be inaugurated in all schools in order to reduce the length of time lost in case of non-promotion and to make possible the entrance of pupils to Grade I. in February, thus saving from one to six months of each child's life. This would tend to reduce over-age in that grade

That some person be delegated to analyze and interpret principal's reports and to make investigations of problems arising. In some cities this study is the work of a definite Bureau of Reference and Research

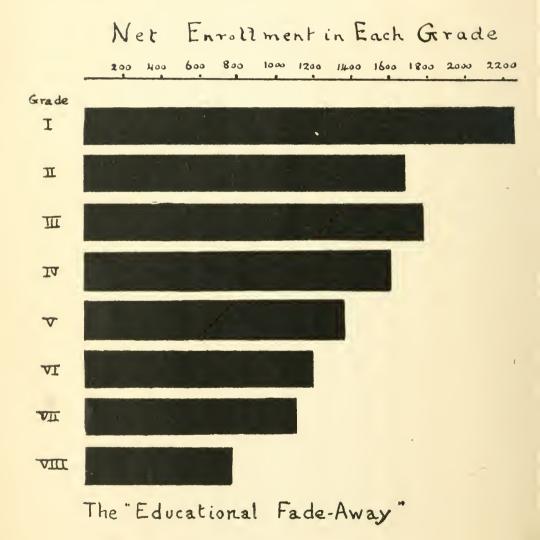
Table I.—Shows the number of children by age and grade—

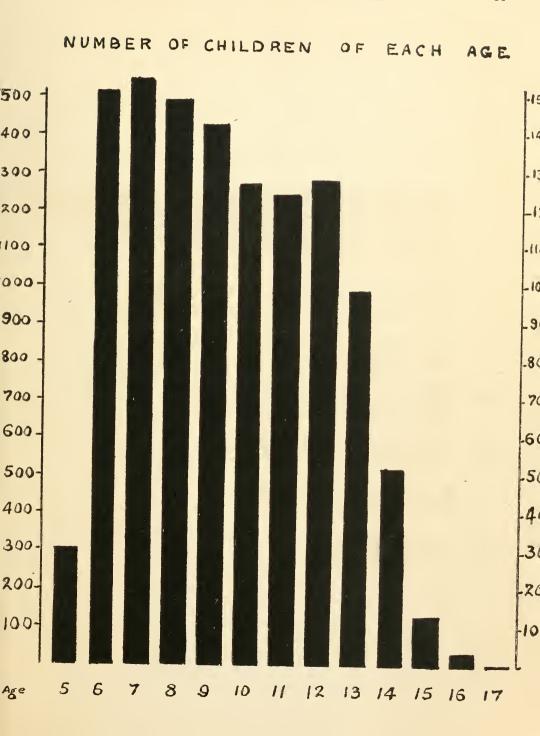
Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
					-									
I	309	1308	451	128	52	11	6	4	2	1				2272
II		203	906	372	115	52	30	8		2				1688
III			188	823	455	169	73	45	19	2	2			1776
IV				168	621	414	224	113	43	19	2	2		1606
V				2	179	475	307	236	111	51	6	1		1368
VI					4	148	439	344	166	69	16	5	1	1192
VII						8	158	430	318	159	26	5		1104
VIII							8	104	334	221	84	10	2	763
Total	309	1511	1545	1493	1426	1277	1245	1284	993	524	136	23	3	11769

Table I.A—Shows the number of children by age and grade in the five upper grades of the Patterson school.

	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	
Grade	1/2		1/2	1	1/2		1/2		1/2		1/2		1/2		1/2		1/2		Total
	-	-	-	-		-	-	-				-	-	-		-	-	-	
IV-B	1	1	8	7		4	1		1										23
IV-A		3	13	18	10	11	5	3	4	2	1								70
V-B					7	12	2	4		4	2	1							32
V-A					10	14	4	8	2	1	1	2		1					43
VI-B							10	6	10	1	7								34
VI-A							4	24	8	9	1	3	1						50
VII-B	ł						2	9	6	8	6	4	3	2		1			41
VII-A			1	1					5	6	12	6	7	2					38
VIII-B	ļ								1	2	5	8	12	5	2	1	1	1	38
VIII-A											4	15	13	11	4	4	2		53
			_	-	-	-	-	-	-		_			-		-	-		
Total	1	4	21	25	27	41	28	54	37	33	39	39	36	21	6	6	3	1	422

The number of children enrolled in the Dayton schools for the years 1912-'13 shown in tables I. and I.A, minus the transfers from one school to another in the city, was 12,191. As is usually the case the first grade contains the greatest number.





#### OVER-AGE

Table II.—Shows by grade the number and percentage of pupils under the normal age, at the normal age, and over the normal age.

Grade	Younge Nort		Nor	mal	Older Nori		Total		
	No. %		No.	%	No.	1 %	No.	%	
I	309	13	1308	58	655	29	2272	100	
11	203	12	906	54	579	34	1688	44	
III	188	11	823	46	765	43	1776	44	
IV	168	10	621	39	817	51	1606	"	
V	181	13	475	35	712	52	1368		
VI	152	13	439	37	601	50	1192	44	
VII	166	15	430	39	508	46	1104	44	
VIII	112	14	334	44	317	42	763	- "	
Total	1479	13	5336	45	4954	42	11769	100	

Table 2 shows that out of the 11,769 children in the grade schools, exclusive of the upper grades in the Patterson school, 1,479 or 13% are younger than the normal age for the grade, 5,336 or 45% are of normal age and 4,954 or 42% are older than they should be for the grade. The number of over-age children almost equals the number of children of normal age for their grades.

The lowest percent of over-age (29%) is in Grade I.; it increases to 52%, the maximum in Grade V. after which it gradually decreases to 42% in Grade VIII. This over-age may be caused by,

- 1. Late entrance to the first grade
- 2. Slow progress through the grades

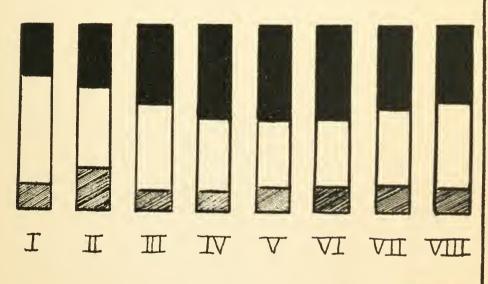
How important a part the first cause plays in the amount of overage may be estimated from the fact that 29% of the children in the first grade are over the normal age. This is especially significant because promotions are made but once a year—a feature necessitating many children to wait an additional half year before being allowed to enter school. How many of these entered after the 7th birthday is not known.

However, retardation is no inconsiderable factor in over-age when it is seen that this 29% in the first grade increases to 52% in the fifth grade—and a similar decrease from 58% to 35% in the percentage of normal children during this same period.

The drop in the percentage of over-age children after Grade V. is explained by table 7, from which it appears that these pupils leave school.

Percentage of Children in Each Grade who are

Under, Normal and Over Age.



Under Age
Normal Age
Over Age

Table II.A—Shows by grade the number and percentage of pupils under the normal age, at the normal age and over the normal age in the five upper grades of the Patterson school.

Grade	,	Younger than Normal		nal	Older Nori		Total		
	No.	C.	No.	%	No.	%	No.	%	
IV-B IV-A	10 34	44 49	7 10	30 14	6 26	26 37	23 70	100	
V-B	7	22	12	37	13	41	32	46	
V-A	24	56	4	9	15	35	43		
VI-B	10	29	6	18	18	53	34	46	
VI-A	28	56	8	16	14	28	50		
VII-B	17	41	8	20	16	39	41	66	
VII-A	11	29	12	32	15	39	38		
VIII-B	8	21	8	21	22	58	38		
VIII-A	19	36	13	24	21	40	53		
Total	168	40	88	21	166	39	422	100	

In contrast to the results shown by table 2 are the over-age figures in table 2A, which show that in the five upper grades of the Patterson school where promotions occur semi-annually, although 39% are overage, 40% are below the normal age or ahead for their grade. This in face of the fact that only 15% entered the first grade of this school below the normal age and that this school is located in a foreign neighborhood.

Though based on comparatively few figures it seems fair to assume that there is some relation between this favorable showing and semi-

annual promotions.

At the end of the fifth year there were in this school 35% over-age children as against 52% in the other schools, while 56% were below normal age as against 13% in other schools.

Table III.—Shows by grades the number and percentage of pupils according to the number of years under and over the normal age.

Grade		years yo Normal	0	Normal Age	N		s older th al Age	ıan
	1-2	0-1	Total	ngc	0-1	1-2	2 and over	Total
Ι		309	309	1308	451	128	76	655
II	5	198	203	906	372	115	92	579
III		188	188	823	455	169	141	765
IV		168	168	621	414	224	179	817
V	2	179	181	475	307	236	169	712
VI	4	148	152	439	344	166	91	601
VII	8	158	166	430	318	159	31	508
VIII	8	104	112	334	221	84	12	317
Total	27	1452	1479	5336	2882	1281	791	4954

In support of table 2, the above shows that 58% of the over-age pupils are less than a year behind their grades in age, 26% from one to two years and 16% are over two years above the normal age. Conditions appear to be at their worst in Grade V., where the percentage of pupils over two years too old for the grade is highest—24%—double that of the first year; the percentage of pupils less than a year over age is lowest, being 43%. In other words Grade V. shows the highest percentage for bad conditions and the lowest percentage for the better conditions.

The improvement after Grade V is undoubtedly due in large measure to the dropping out of retarded pupils and not so much to any increased school efficiency above that grade.

1,281 children were from one to two years older for the grade than they should have been, and 791 were more than two years behind their grade.

Table III.A—Shows by grades the number and percentage of pupils according to the number of years under and over the normal age in the five upper grades of the Patterson school.

Grade			years younger Normal Age		No. of years older than Normal Age					
	1-2	0-1	Total	Age	0-1	1-2	2 and over	Total		
IV-B IV-A	1 3	9 31	10 34	7 10	4 16	1 7	1 3	6 26		
V-B V-A		7 24	7 24	12 4	6 10	4 2		13 15		
VI-B VI-A		10 28	10 28	6 8	11 10	7 4		18 14		
VII-B VII-A	2	15 11	17 11	8 12	10 13	5 2	1	16 15		
VIII-B VIII-A	1	7 19	8 19	8 13	17 15	3 6	2	22 21		
Total	7	161	168	88	112	41	13	166		

Patterson school shows the great majority (67%) of its over-age pupils less than a year too old for their grades; 25% from one to two years above normal age. As in the other schools Grade V, seems to be the worst offender. It has the lowest percentage (46%) of pupils least over-age and the highest rate (23%) of pupils above the two year mark.

#### **PROGRESS**

Table IV.—Shows the number and percentage of pupils according to the length of time spent in the grade.

		Time in grade on June 20, 1913.											
Grade	Less t Nort		Nori	mal	More Nori		Total						
	No.	%	No.	%	No.	%	No.	%					
I	60	3	1917	84	295	13	2272	100					
II	30	2	1547	91	111	7	1688	66					
III	40	2	1605	91	131	7	1776	**					
IV	41	2	1440	90	125	8	1606	4.6					
V	36	3	1247	91	85	7	1368						
VI	20	2	1127	94	45	4	1192	4.6					
VII	13	1	1068	97	23	2	1104	4.6					
VIII	14	2	718	94	31	4	763	4.6					
Total	254	2	10669	91	846	7	11769	100					

It appears from this table that the largest number and percentage of repeaters are in the first grade, where 13% of the pupils have been in the grade longer than the normal time required to complete it. The rate drops to 7% in Grade II. and remains so thru Grade V., after which it decreases to 4%. Again it is observed that the mortality is greatest in the fifth grade when the repeaters, apparently of age for work, drop out. This point will be brought out more fully in table 7. The increase of 2% between the eighth and seventh grades can probably be explained by the fact that pupils at this stage wait to complete the elementary school course.

In the five upper grades of the Patterson school 95% or 402 of the 422 pupils have been in their grades the normal length of time. In the last half of the eight grade 10 pupils out of 43 were in the grade over one semester, bearing out the theory that pupils generally wait at this time to complete the grade school.

Table V.—Shows the number of pupils according to the length of time spent in the grades.

		Time in Grade on June 20, 1913.									
0 . 1	Less Than Norm'l	Normal		More	Than N	ormal		- Total			
Grade	One Half Year or Less	One Year or Less But Over One Half Year	One and One Half Year or Less But Over One Year	Two Years or Less But Over One and One Half Year	Two and One Half Years or Less But Over Two Years	Three Years or Less But Over Two and One Half Years	Over Three Years				
Ţ	60	1917	41	115	11	112	16	2272			
II	30	1547	30	39	1	41	117	1688			
III	40	1605	21	40	5	64	1	1776			
IV	41	1440	14	48	18	41	4	1606			
V	36	1247	7	46		30	2	1368			
/. I	20	1127	. 4	31	2	8		1192			
7.11	13	1068	3	10		9	1	1104			
VIII	14	718	1	29		1		763			
Total	254	10669	121	358	37	306	24	11769			

Table 5 presenting in detail the progress of the pupils points out the fact that of the children remaining in the grades longer than the normal period, by far the greatest number are retarded two and three full years, comparatively few 1½, 2½ and 3½ years; 121 and 37 pupils have been in the grades 1½ and 2½ years respectively; 358 and 306 have been retained 2 and 3 years. Annual promotions it can be assumed are accountable for this. Of the 24 children in their grades over three years, 16 were in Grade I.

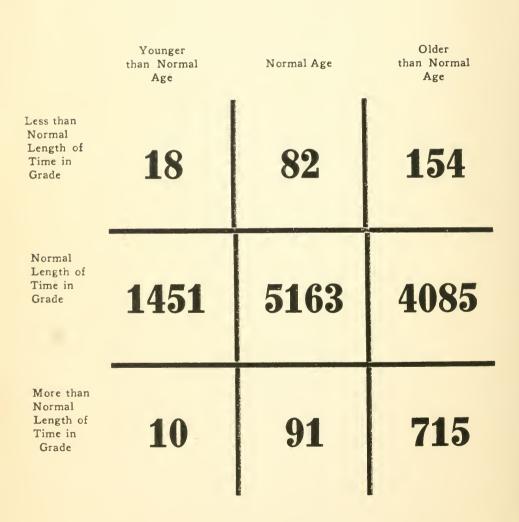
Table V.A—Shows for the five upper grades of the Patterson school the number of pupils according to the length of time spent in the grades.

	Time in Grade on June 20, 1913.												
Cundo	Less Than Norm'l	Normal			77-1-1								
Grade	One Half Semester or Less	One Semester or Less But Over One Half Semester	One and One Half Semester or Less But Over One Semester	One Half	Two and One Half Semesters or Less But Over Two Semesters	Three Semesters or Less But Over Two and One Half Semesters	Over Three Semesters	Total					
IV-B IV-A	3	23 65		2				23 70					
V-B V-A		32 39	4					32 43					
VI-B VI-A	•	34 50						34 50					
VII-B VII-A	:	41 38						41 38					
VIII-B VIII-A	1	37 43	10					38 53					
Total	4	402	14	2				422					

In this table the significant contrast between the Patterson and the other schools again appears. Out of the 422 children in the five upper grades of this school, 402 made normal progress, while 14 were behind but 1½ semesters. Pupils in this school, due to the system of semi-annual promotions, lose but a half year at a time if retarded.

# Age and Progress Chart of Children in Elementary Schools

(Exclusive of Patterson School)



#### PROMOTION AND NON-PROMOTION

Annual promotions in all but the five upper grades of the Patterson school is the prevailing system in Dayton. In lieu of semi-annual promotions the superintendent of schools has devised a method by which pupils who are deficient in February are permitted to go on with their classes in all subjects, but receive special attention in the subjects in which they have failed. By the end of the year, according to the superintendent, the great majority of such children are proficient and eligible for promotion.

The coaching of these children is done by assistant teachers—recent graduates of the local Normal school. The record of the Patterson school seems to indicate that this method is not nearly so efficient in decreasing time lost to pupils as is the method of semi-annual promotions. A combination of the two methods should be more effective than either.

Table VI.—Shows by grades the number and percentage of pupils promoted, not promoted and dropped out.

Grade	Promo	oted	Not Pro	moted	Droppe	d Out	Total		
Grade	No.	%	No.	%	No.	%c	No.	%	
I	1708	75	314	14	250	11	2272	100	
H	1497	89	77	4	114	7	1688	66	
III	1545	87	126	7	105	6	1776	+ 6	
IV	1354	85	116	7	136	8	1606	46	
V	1157	84	107	8	104	8	1368		
VI	1041	87	61	5	90	8	1192	44	
VII	960	87	37	3	107	10	1104	- 64	
VIII	696	91	5	1	62	8	763		
Total	9958	85	843	~~~	968	8	11769	100	

Table 6 shows that the lowest rate of promotion (75%) exists in the first grade and the highest rate (91%) in the eighth. It seems natural that such be the case in the eighth grade because the fittest survive the entire school course. The low rate prevailing in the first grade cannot be explained so readily. It may be due to—

- 1. Immaturity
- 2. Over size classes
- 3. Absence

To which of these causes it is attributable will be brought out in tables 7, 9 and 10.

The reason for the heavy dropping out in the first grade (11%) cannot be determined definitely from the data at hand. Due to the closing

of the schools for a month at the time of the flood which occurred in Dayton in March, 1913, many of the younger children dropped out, not to return for the year, after the schools were reopened. Many families left their homes in the flooded districts, and did not send their children back to school for the two remaining months of the term.

The 10% of dropping out which occurred in the seventh grade is probably normal for that grade and is due to the children having reached the working age.

Table VI.A—Shows by grades the number and percentage of pupils promoted, not promoted and dropped out in the five upper grades of the Patterson school.

Grade	Promoted		Not Promoted		Droppe	d Out	Total	
	No.	C.c	No.	%	No.	%	No.	%
IV-B IV-A	22 64	96 92	1 3	4 4	3	4	23 70	100
V-B V-A	31 40	97 93	1 3	3 7			32 43	4.6
VI-B VI-A	34 50	100 100				. 1	34 50	16
VII-B VII-A	38 37	93 97			3 1	7 3	41 38	.6
VIII-B VIII-A	29 48	7.6 90	1	2	9 4	24 8	34 53	46
Total	393	93	9	2	20	ő	422	100

The rates of promotion in the upper grades of the Patterson school were all over 90%, except in the first half of the 8th grade, where it was 76%. Here it will be noticed that 24% of the pupils dropped out. The rate of promotion in the other schools was 85%.

Table VII.—Shows by grades the number and percentage of pupils promoted, not promoted and dropped out according to whether they are under the normal age, of normal age or over the normal age.

	The state of the s	Number of Children							
Grade	Age in Relation to Grade	Prom	oted	Not Promoted		Dropped Out		Total	
		No.	%c	No.	%	No.	%	No.	
I	Under Normal	219	71	67	22	23	7	309	
	Normal	1005	77	169	13	134	10	1308	
	Over Normal	484	74	78	12	93	14	655	
	Total	1708	75	314	14	250	11	2272	
II	Under Normal	184	91	10	4	9	5	203	
	Normal	825	91	36	4	45	5	906	
	Over Normal	488	85	31	5	60	10	579	
	Total	1497	89	77	4	114	7	1688	
III	Under Normal	165	88	13	7	10	5	188	
	Normal	746	91	42	5	35	4	823	
	Over Normal	634	83	71	9	60	8	765	
	Total	1545	87	126	7	105	6	1776	
IV	Under Normal Normal Over Normal Total	147 552 655 1354	87 89 - 80 85	10 31 75 116	6 5 9 7	11 38 87 136	6 11 8	168 621 817 1606	
V	Under Normal	173	95	5	3	3	2	181	
	Normal	447	95	15	3	13	2	475	
	Over Normal	537	75	87	12	88	13	712	
	Total	1157	84	107	8	104	8	1368	
VI	Under Normal	143	93	6	4	3	3	152	
	Norma!	412	94	13	3	14	3	439	
	Over Normal	486	81	42	7	73	12	601	
	Total	1041	87	61	5	90	8	1192	
VII	Under Normal	157	95	2	1	7	4	166	
	Normal	406	95	10	2	14	3	430	
	Over Normal	397	78	25	5	86	17	508	
	Total	960	87	37	3	107	10	1104	
VIII	Under Normal Normal Over Normal Total	110 315 271 696	98 84 86 91	1 4 5	1 1 1	1 19 42 62	1 6 13 8	112 334 317 763	
Totals	Under Normal Normal Over Normal Grand Total	1298 4708 3952 9958	87 88 80 85	113 318 412 843	8 6 8	70 305 593 968	5 6 12 8	1481 5331 4957 11769	

Table 7 shows a distinct causal relation between non-promotion and over-age in all grades except the first. In Grade I., where the promotion rate is lowest and non-promotion highest, it will be observed that

22', of the pupils too young for this grade have failed of promotion, pointing out the fact that immaturity is a noticeable factor in the retardation of pupils in Grade I. This rather explains the high rate of non-promotion for this grade. It is still to be seen how significant in this

respect are absence and over-size classes.

The only instance in which the rate of non-promotion is not the highest for the "Over Normal Age" group is found in Grade I. In all the other grades the failures among the overage pupils are higher and the promotions are lower than those of the "Under Normal" and "Normal" pupils combined. In Grade V. the non-promotion rate in the "Older than Normal" group is 100% higher than that of the "Normal" and "Younger than Normal" pupils combined.

In all the grades except Grade I, the rates of promotion and non-promotion of the "Under Normal" and "Normal" groups are equal or

vary 1% or 2% either way.

The highest percentage of elimination in every grade occurs in the "Over Age" group. It is also true that in all grades except the first, the number of "Over Normal Age" pupils dropping out exceeds that of the other two groups combined and doubles them in the upper grades. What becomes of these children who dropped out below the fifth grade cannot be determined from the data at hand. It is presumed that they returned to school either in Dayton or in some other city.

Usually it is found that in Grade I, the children who are too young for the grade drop out. The reversal of affairs, according to this table, where the dropping out for "Over Normal" children is 100% greater than that of the "Under Normal" children, cannot be explained from available information. However, the abnormal conditions in Dayton last year

nust be taken into consideration.

Table VII.A—Shows for the five upper grades of the Patterson school the number and percentage of pupils promoted, not promoted and dropped out according to whether they are under normal, normal or over the normal age.

		Number of Children							
Grade	Age in Relation to Grade	Promoted		Not Promoted		Dropped Out		Tota!	
		No.	%	No.	<i>c</i> 70	No.	%	No.	
IV-B	Below Normal Normal Above Normal Total	10 6 6 22	109 36 100 96	1	14			10 7 6 23	
IV-A	Below Normal Normal Above Normal Total	32 - 9 23 64	94 90 88 92	1 1 1 3	3 10 4 4	1 2 3	3 8 4	34 10 26 70	
V-B	Below Normal Normal Above Normal Total	7 12 12 31	100 · 100 · 92 97	1 1	8			7 12 13 32	
V-A	Below Normal Normal Above Normal Total	23 4 13 40	96 100 87 93	1 2 3	1:3			24 4 15 43	
VI-B	Below Normal Normal Above Normal Total	10 6 18 34	100 100 100 100	ſ				10 6 18 34	
VI-A	Below Normal Normal Above Normal Total	28 8 14 50	100 100 100 100					28 8 14 50	
VII-B	Below Normal Normal Above Normal Total	16 8 14 38	94 100 88 93			1 2 3	6 12 7	17 8 16 41	
VII-A	Below Normal Normal Above Normal Total	11 11 15 37	100 92 100 97			1	8	11 12 15 38	
VIII-B	Below Normal Normal Above Normal Total	8 7 14 29	100 87 64 76			1 8 9	13 36 24	8 8 22 38	
VIII-A	Below Normal Normal Above Normal Total	19 13 16 48	100 100 76 90	1 1	5 2	4 4	19 8	19 13 21 53	
Totals	Below Normal Normal Above Normal Total	164 84 145 393	98 96 87 93	2 2 5 9	1 2 3 2	2 2 16 20	1 2 10 5	168 88 166 422	

In the five upper grades of the Patterson school where 40% of the pupils are below the normal age, the promotion rates in all of the age groups range from 87% to 100%. In Grade IV, only, does the rate fall to 64% and 76%. These occur in the over-age group, from which the pupils dropped out. But one pupil in all of the three upper grades failed to advance last year, and only three pupils dropped out in the 4th, 5th and 6th grades.

For all grades the rate of promotion for "Under Normal" children was 98%; for "Normal" 96%, and for "Older than Normal" 87%. In the last named group 10% of the children dropped out, the heaviest elimination taking place in the first half of Grade VIII.

Table VIII.—Shows by grades the number and percentage of pupils promoted, not promoted and dropped out according to the length of time spent in the grade.

Grade	Time in Grade on	Fromoted		Not Promoted		Dropped Out		Total	
	June 20, 1913	No.	%	No.	%	No.	%	No.	
I	½ yr. or less 1 yr. or less, but	11	18	6	10	43	72	60	
	over ½ yr. Over 1 yr. Total	1455 242 1708	75 83 75	277 31 314	15 16 14	184 23 250	10 7 11	1891 321 2272	
II	½ yr. or less 1 yr. or less, but	11	37			19	63	30	
	over ½ yr. Over 1 yr. Total	1382 104 1497	89 92 88	71 6 77	5 5 5	92 3 114	6 3 7	1546 112 1688	
III	½ yr. or less 1 yr. or less, but	16	40	4	7	20	50	40	
	over ½ yr. Over 1 yr. Total	$1424 \\ 105 \\ 1545$	22 85 87	113 9 126	10 7 7	75 10 105	5 8 6	1612 124 1776	
IV	1/2 yr. or less	13	32	3	7	25	61	41	
	1 yr. or less, but over ½ yr. Over 1 yr. Total	1237 104 1354	85 85 85	108 5 116	2 4 24	95 16 136	7 11 8	1440 125 1606	
V	½ yr. or less	9	25	3	8	24	67	36	
	1 yr. or less, but over ½ yr. Over 1 yr. Total	1077 71 1157	87 81 84	100 4 107	× 35 85	68 12 104	5 14 8	1245 87 1368	
VI	1/2 yr. or less	4	20	2	10	14	70	20	
	1 yr. or less, but over ½ yr. Over 1 yr. Total	1000 37 1041	89 82 87	56 3 61	5 7 5	71 5 90	6 11 8	1127 45 1192	
VII	½ yr. or less	2	15	1	ş	10	77	13	
	1 yr. or less, but over ½ yr. Over 1 yr. Total	939 19 960	88 83 87	36 37	5	93 4 107	9 17 = 10	1068 23 1104	
VIII	½ yr. or less	1	7			13	93	14	
	1 yr. or less, but over ½ yr. Over 1 yr. Total	692 3 696	93 100 91	5 5	1	49 62	6 8	746 3 763	
Totals	½ yr. or less	67	26	19		168	66	254	
	1 yr. or less, but over ½ yr. Over 1 yr. Total	9182 709 9958	86 84 85	766 58 843	7 7	727 73 968	7 9 8	10675 840 11769	

As would be expected, the percentage of promotions in all grades is lowest for pupils in the grade less than the normal period, the rates ranging from 7% in Grade VIII., to 40% in Grade III. The highest rate of promotion, except in Grades I., II. and VIII., occurs among pupils spending the normal time in the grade. In all but the three grades mentioned the rates of promotion for pupils spending more than the normal period in the grade or repeaters are lower than the rates for those who have been in the grade but the normal period. In grades I., II. and VIII, the percentages for the "Normal Period" pupils are 76%, 82% and 89% respectively, as against 92%, 93% and 100% respectively for the repeaters.

The average rate of promotion in all grades is highest for "Normal Period" pupils, being 86%. The next in order is the "Over Normal" with 84% and lowest the "Under Normal Period" pupils with 26%. The effect of time spent in a grade upon eliminations is made apparent by the high percentage of dropping out among pupils who have been in the grade less than the normal period. The rate is 66% for all the grades as against the 7% for pupils in the "Normal Period" and 9% in the "Over Normal Period." The lowest rate of elimination for the "Under Normal" pupils exists in the Third Grade, where 50% drop out, and the highest in the Eighth Grade with 93% dropping out.

Conversely for these two grades, it appears that a pupil can make up the work most rapidly in the former, while it seems most difficult to become proficient in the work in Grade VIII., the rate of promotion being highest for the "Under Normal" period pupils in Grade III., and lowest in Grade VIII.

Table IX.—Shows by grades the number and percentage of pupils promoted, not promoted and dropped out according to number of half days absent during the half year.

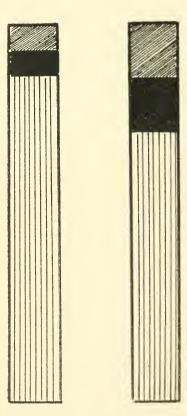
Grade	Half Days Absent	Promoted		Not Promoted		Dropped Out		Total
		No.	%	No.	%	No.	%	No.
I	Less than 25	1481	76	245	13	215	11	1941
	25 or more Total	227 1708	68 75	69 314	21 14	35 250	11 11	331 2272
II	Less than 25	1352	89	62	4	99	7	1512
	25 or more Total	145 1497	82 89	15 77	9	16 114	9 7	176 1688
III	Less than 25	1392	87	113	7	86	6	1591
	25 or more Total	153 1545	83 87	13 126	8 7	19 105	9 6	$\frac{185}{1776}$
IV	Less than 25 25 or more	1246 108	86	90	6	110	8	1446
	Total	1354	68 85	26 116	16 7	26 136	16 8	160 1606
V	Less than 25	1036	86	78	7	80	7	1194
	25 or more Total	121 1157	69 84	29 107	17 8	24 104	14 8	174 1368
VI	Less than 25 25 or more	941 100	90	46	4	63	6	1050
	Total Total	1041	70 87	15 61	11 5	27 90	19 8	142 1192
VII	Less than 25	897	89	27	3	80	8	1004
	25 or more Total	63 960	63 87	10 37	10 3	27 107	27 10	100 1104
VIII	Less than 25	664	92	5	1	52	7	721
	25 or more Total	32 696	70 91	5	1	10 62	30 8	42 763
Totals	Less than 25 25 or more	9009	87	666	6	782	7	10457
	Total	949 9958	72 85	177 843	14	186 968	14 8	1312 11769

An absence of 25 half days for the half year was decided upon arbitrarily as being a sufficient number of days to affect the promotion of pupils. According to this basis the figures in Table 9 show consistently for all grades that the rate of promotion for pupils absent less than 25 half days for the half year, is decidedly higher than the rate for the pupils who were more irregular in attendance. The difference in these two rates ranges from 4% in Grade III. to 22% in Grade VIII. For all grades, 87% of the pupils absent less than 25 half days are promoted; only 72% of the others advance. This is a difference of 15%.

Non-promotion rates are from 1% to 10% higher for children absent over 25 half days.

Elimination rates for frequent absentees are from 2% to 23% higher than for pupils attending regularly.

Rate of Promotion, Non-Promotion and Dropping Out According to length of Absence



Absent less than 25 half days 25 half days

Absent more than

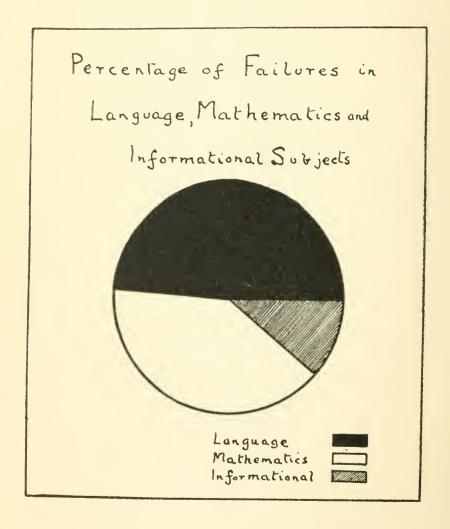
Promotion Non-promotion Dropping Out.



### NATURE OF FAILURES

Table X.—Shows by grades and by age groups the number and percentage of pupils failing in each class of subjects.

				Fai	lures			
Grade	Age in Relation to Grade	Lang	uage	Mather	natics	Infor tion		Total
		No.	%	No.	%	No.	%	No.
I	Below Normal Normal Above Normal Total	67 168 79 314	100					67 168 79 314
II	Below Normal Normal Above Normal Total	12 32 34 78	67 59 60 60	6 20 23 49	33 37 40 38	2 2	4	18 54 57 129
III	Below Normal Normal Above Normal Total	1 15 28 44	8 29 32 29	11 36 54 101	84 69 63 67	1 1 4 6	8 2 5 4	13 52 86 151
IV	Below Normal Normal Above Normal Total	2 5 27 34	12 12 22 19	10 30 64 104	63 71 51 57	4 7 33 44	25 17 27 24	16 42 124 182
V -	Below Normal Normal Above Normal Total	3 3 22 28	50 13 18 19	3 16 79 98	50 70 65 65	4 21 25	17 17 16	6 23 122 151
VI	Below Normal Normal Above Normal Total	4 6 5 15	40 32 8 17	5 11 38 54	50 58 63 61	1 2 17 20	10 10 29 22	10 19 60 89
VII	Below Normal Normal Above Normal Total	2 3 20 25	50 16 34 31	2 8 24 34	50 42 41 41	8 15 23	42 25 28	4 19 59 82
VIII	Below Normal Normal Above Normal Total	1 3 4	37 40	1 3 4	50 37 40	2 2	26 20	2 8 10
Totals	Below Normal Normal Above Normal Total	92 232 218 542	68 62 37 49	38 121 285 444	28 32 48 40	24 92 122	4 6 15 11	136 377 595 1108



Failures are divided into three groups: those occurring in language, in mathematics and in informational subjects—history, geography, etc.

In Grade I., 100% of the failures are in language—this being the chief subject taught. These failures probably include foreign children who comprise about 15% of the pupils in some schools.

Sixty per cent of the failures in Grade II. are in language.

In all the other grades mathematics causes from 100% to 150% more failures than either language or the informational subjects.

The relationship of the various age groups to failures shows that in language the highest rate of failure (68%) occurs among the "Younger than Normal" children.

In mathematics the "Older than Normal" group leads with 48% of failures; the "Normal" group follows with 32%; the "Under Normal" 28%.

In the informational subjects the rate of failure in the "Over Age" group is 15%; the "Normal Age" group, 6%; the "Under Normal" 4%.

Of all the failures 49% occurred in language; 40% in mathematics and 11% in the informational subjects. This high average rate in language is influenced in great part by the 100% language failure shown in Grade 1.

There seems to be no significant relationship between the grade and the nature of the failure or the age group, except that in the four upper grades the language failures are located among the "Under Normal Age" pupils.

There were 15 failures in the five upper grades of the Patterson school. The over-age pupils made up over half in all three groups combined.

Table XI.—Compares promotion rates in classes having less than 40 pupils; between 40 and 50 pupils; and over 50 pupils.

	Le	ss than	40		40-50		Over 50			
Grade	P.	N. P.	D. O.	Р.	N. P.	. D. O.	Р.	N. P.	D. O.	
	%	%	7c	%	%	%	%	%	%	
I	7.5	9	16	77	15	8	74	14	12	
II	88	5	7	90	5	5	89	5	6	
III	92	5	3	84	9	7	85	6	9	
ΙV	89	5	6	82	9	9	80	6	14	
V	84	8	8	87	7	6				
VI	88	5	7	88	4	8	89	9	2	
VII	87	3	10	91	3	6				
VIII	89	1	10	95		5				
All Grades	87	5	8	85	8	7	80	10	10	

P.—Indicates "promoted."

According to the above table promotions are highest in the smaller sized classes.

In the classes containing less than 40 pupils the rate of promotion is 87%; in classes of 40-50 it is 85%, and in classes of over 50 pupils the rate drops to 80%.

Non-promotion increases from 5% in the small sized classes to 10% in classes over 50.

Dropping out of pupils increases in the same proportion, 5%, 8% and 10% respectively for the three groups of classes.

N. P.—Indicates "not promoted."

D. O.—Indicates "dropped out."

#### DROPPING OUT

Table XII.—Shows the number and percentage of pupils dropping out in the lower and higher grades.

Number	Per Cent.		
712	73		
276	27		
608	61		
380	39		
	712 276 608		

The figures given above represent the number of pupils who dropped out of the Dayton schools between September, 1912, and June, 1913, i. e., during the school year of 1912-'13.

Of the total eliminated 73% dropped out below the sixth grade. This excessive percentage in the lower grades, as explained under table 6, is due to the fact that many of the younger children did not return to school after the flood which occurred in the spring of 1913. One school, all the pupils of which lived in the flooded district, shows a dropping out of 20% of the net enrollment of the school. It seems apparent, therefore, that these figures do not portray typical conditions.

However, even under these circumstances, the fact that 39% of the pupils eliminated, dropped out in the four upper grades, is worth noting and investigating.

Elimination at this time may be caused by

- 1. The necessity of these children to earn money as soon as the working age has been reached.
  - 2. Slow progress through grades.
  - 3. Over-age.
  - 4. Uninteresting curriculum.
  - 5. Dissatisfaction generally because of the latter three conditions.

The increase, by a recent statute, of the minimum working age for boys and girls will diminish dropping out much before the completion of the elementary school course.

### SIZE OF CLASSES

Table XIII.—Shows the number and percentage of classes in each grade according to the number of pupils in the class.

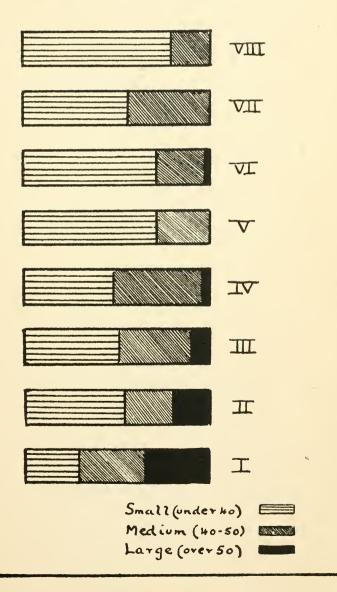
			N	umber o	of Classes			
Grade	Under 40		40-5	40-50		50	Total	
	No.	%	No.	%	No.	%	No.	%
I	15	30	17	35	17	35	49	100
11	25	54	12	26	9	20	46	66
III	25	51	19	39	5	10	49	
IV	22	48	21	48	2	4	42	
V	30	71	13	29			41	+6
VI	25	71	9	26	2	3	34	66
VII	25	56	10	44			43	4.6
VIII	22	79	5	21			24	66
Total	189	57	106	32	35	11	330	100

There were 330 classes in the elementary schools last year. Of this number 189 or 57% contained under 40 pupils; 106 or 32% had from 40 to 50 pupils and 11% of the classes had over 50 pupils.

Grade I has the lowest percentage (30%) of small grades, and the highest rate (35%) of "Over 50" classes. Grade VIII. has the highest percentage (79%) of small classes. There are only two classes containing over 50 pupils above Grade IV. These two are in Grade VI.

### Percentage of Small, Medium and Large

### Classes in Each Grade



AGE AT GRADUATION

Table XIV.—Shows the age of the pupils graduated.

	A11 S	Schools	Patterso	on School
Age	Number	Percentage of Total Graduating	Number	Percentage of Total Graduating
121/3	8	1		
13	17	2		
131/3	85	12	4	8
14	170	23	15	32
141/3	145	18	13	27
15	119	17	7	15
151/2	77	11	4	8
16	45	6	3	6
161/3	19	3	2	4
17	6	1		
171/2	3	1		
18	2	1		
			1	
Normal or less	425	61	32	67
Older than Normal	271	39	16	33

Taking the normal age of completing Grade VIII. as 14 to 15 years, it is found that in all schools but the Patterson, 61% of the children graduating are of the normal age or less than the normal age.

In the Patterson school where promotions occur semi-annually the percentage of such children graduating is 67%, a difference of 6% in favor of this school.

23% of the graduates of all schools are 14 years of age; in the Patterson school 32% of those graduating were 14 years old at the time.

### AGE VARIATION

Table XV.—Shows the variation in age among pupils in the same grade.

Grade	Age Extremes	Years Variation
I	5—14	9
II	614	8
III	7—15	8
IV	8—16	8
V	8-16	8
VI	9—17	8
VII	10—16	6
VIII	11—17	6

The ages of children in the same grade vary six years in Grades VII. and VIII.; nine years in Grade I., and eight years in the remainder of the grades.

In order to secure effective work, among other elements, the ages of children should be considered. No classification taking this into account is made in the Dayton schools, even where there are two or more classes to a grade in a school.

### **APPENDIX**

Tables showing by schools all data contained in the body of the report.

Note: The schools marked \* in these tables are the seven schools in Dayton which are located in so-called "foreign" neighborhoods. The percentage of foreign children unable to speak English, or from homes where English is not spoken, is approximately 15%.

AGE TABLE

Table I.—Shows by schools the number and percentage of pupils according to the age groups.

School	Un Norma		Norma	1 Age	Ove Norma		Total	
School	No.	90	No.	%	No.	%	No.	%
Central	58	11	249	47	227	42	534	100
Franklin	105	22	209	33	154	45	468	64
Garfield	56	12	228	48	190	40	474	66
Harrison	30	13	103	45	96	42	229	66
Hawthorne	30	10	172	53	95	32	297	66
Huffman	93	15	288	44	267	41	648	4.6
Irving	69	15	217	48	165	37	451	4.4
Jackson	24	11	80	37	115	52	219	46
Longfellow	134	20	372	55	173	25	679	66
McKinley	52	8	344	52	269	40	665	66
Van Cleve	67	13	326	64	119	23	512	+6
Washington	79	11	308	41	362	43	749	4.6
Weaver	132	13	401	41	453	46	986	64
Whittier	9	4	108	51	94	4.5	211	4.6
Willard	43	8	219	36	336	56	598	64
Allen*	80	14	227	39	276	47	583	66
Edison*	59	12 .	187	38	243	50	489	4.6
Emerson*	98	11	322	38	431	51	851	6.4
Patterson*	227	31	294	40	215	29	736	66
Ruskin*	109	13	272	44	237	38	618	66
Schiller*	56	9	242	41	293	50	591	**
Webster*	37	7	256	42	310	51	603	6.6
Total	1647	13	5424	45	5120	42	12191	100

## Percentage of Under, Normal and Over Age According to Schools

Van Clere	
Longfellow	
Patterson	The state of the s
Hawthorne	
Irving	
Ruskin	
McKinley	
Garfield	
Huffman	
Harrison	
Central	
Franklin	
Whittier	Manager and a property
Weaver	
Allen	
Washington	
Schiller	
Edison	
Emerson	
Webster	
Jackson	
Willard	
	Under Age

Normal Age Over Age

### PROGRESS TABLE

Table II.—Shows by schools the number and percentage of pupils according to the time spent in the grade.

			Time	in Grade	June 20,	1913		
Schools	½ yr. or less		1 yr. or less, but over ½ yr.		Over 1	уг.	Total	
	No.	%	No.	%	No.	%	No.	%
Central	33	6	472	89	29	5	534	100
Franklin	3	1	406	86	59	13	468	4.6
Garfield	1	1	440	92	33	7	474	6.6
Harrison	2	1	213	93	14	6	229	4.6
Hawthorne			293	99	4	1	297	66
Huffman	15	2	609	94	24	4	648	
rving	20	4	412	92	19	4	451	4.6
ackson	19	9	194	88	6	3	219	+ +
ongfellow			656	97	23	3	679	4.6
McKinley	36	5	607	92	22	3	665	16
Van Cleve	5	1	495	97	12	2	512	4.6
Washington	25	3	623	84	101	13	749	4.4
Weaver	2	1	878	89	106	10	986	66
Whittier			185	88	26	12	211	6.6
Willard			540	90	58	10	598	4.4
Allen*	18	3	526	90	39	7	583	4.4
Edison*	9	2	439	90	41	8	489	4.4
Emerson*	11	1	775	91	65	8	851	4.4
Patterson*	17	2	688	94	31	4	736	* *
Ruskin*	18	3	559	90	41	7	618	**
Schiller*	11	2	531	90	40	8	591	4.4
Webster*	13	2	530	88	60	10	603	4.6
Total	258	2	11071	91	862	7	12191	100

### PROMOTION TABLE

Table III.—Shows by schools the number and percentage of pupils promoted, not promoted and dropped out.

	Promo	oted	Not Promo	1	Drop <u>j</u> Ou	1	Tot	a1
Schools	No.	%	No.	%	No.	%	No.	%
Central	381	71	19	4	134	25	534	100
Franklin	439	94	19	4	10	2	468	6 b
Garfield	419	89	34	7	21	4	473	**
Harrison	218	95	9	4	2	1	229	4.4
Hawthorne	251	85	2.2	7	24	8	297	6.0
Huffman	593	92	22	3	33	5	648	4.6
Irving	408	91	19	4	24	5	451	b b
Jackson	179	82	4	2	36	16	219	64
Longfellow	619	91	35	5	25	4	679	1.6
McKinley	563	85	43	7	54	8	665	1.6
Van Cleve	480	93	13	*>	19	4	512	66
Washington	616	83	52	ĩ	81	11	749	6.4
Weaver	801	81	90	9	95	10	986	6.4
Whittier	196	93	9	4	6	3	211	. 4
Willard	488	82	50	8	60	10	598	. 6
Allen*	509	87	39	~	35	6	533	1.6
Edison*	405	83	38	8	46	9	439	
F.merson*	704	83	85	10	62	7	851	4.6
Patterson*	659	89	35	3	42	6	736	6.6
Ruskin*	524	85	43	7	51	8	618	6.6
Schiller*	495	84	7.6	13	20	3	591	4.6
Webster*	404	67	91	15	108	18	603	
Total	10351	85	852	~	938	8	12191	100

### PROMOTION RATE ACCORDING TO SCHOOLS

Harrison

60% 70% 80% 90% 100%

Franklin		. 1	•0	, ,		No.	0		
Van Cleve									
Whittier		. ,		ý.	1.				
Huffman							29		
Longfellow					1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Irving					"				
Patterson				_0					
Garfield									
Allen			y						
Hawthorne									
Ruskin									
Mikinley						مانات			
Schiller									
Emerson						* .			
Edison		-							
Washington									
Jackson									
Willard									
Weaver									
Central									
Webster									
	***************************************			6	0%	70%	80%	90%	100%

### NATURE OF FAILURES

Table IV.—Shows by schools the number and percentage of pupils according to the class of subject in which they failed.

				Fa	ilures			
Schools	Langi	ıage	Mathen	natics	Informa	tional	Tot	al
	No.	%	No.	%	No.	%	No.	%
Central	13	45	12	41	4	14	29	100
Franklin	15	52	10	34	4	14	29	4.6
Garfield	23	50	16	35	7	15	46	4.6
Harrison	6	60	3	30	1	10	10	. 6
Hawthorne	13	50	12	46	1	4	26	"
Huffman	14	50	12	43	3	7	28	6.6
Irving	16	52	9	29	6	19	31	44
Jackson	2	40	3	60			5	44
Longfellow	30	64	13	28	4	8	47	
McKinley	34	51	25	37	8	12	67	6.6
Van Cleve	7	41	8	47	2	12	17	
Washington	29	51	27	47	1	2	57	
Weaver	67	51	46	35	18	14	131	6.6
Whittier	7	64	3	27	1	9	11	6.6
Willard	30	48	31	49	2	3	63	
Allen*	23	59	16	41			39	4.6
Edison*	22	53	13	32	6	15	41	4.4
Emerson*	49	42	57	48	12	10	118	66
Patterson*	28	64	12	27	4	9	44	66
Ruskin*	29	53	15	27	11	20	55	66
Schiller*	34	35	50	52	13	13	97	44
Webster*	56	42	57	43	19	15	132	.6
Total	547	49	450	40	126	11	1123	100







# Publications of the Bureau of Municipal Research:

Organization of the Bureau of Municipal Research. (Folder.)

Shall we change our Form of Government? (16 p.p.)

Appropriation Ordinance,-first half of year 1913. (30 p.p.

A Plan to Place the Water Works upon a Self-Sustaining Basis. (28 p.p.)

Government by Deficit. (3 folders.)

Organization and Administration of the Department of Health. (97 p.p.)

Health Bulletins. (8 folders.)

Appropriation Ordinance,—2d half of year 1913. (30 p.p.)

Reprint of the Dayton Charter. (64 p.p.)

Motor Fire Apparatus Bids. (Folder.)

A Complaint-Suggestion Bureau. (Folder.)

The City Budget-1914. (42 p.p.)

The City Manager Plan of Government for Dayton. (8 p.p.)

A Charter Primer. (24 p.p.)

Some Acid Tests of City-Manager Government. (Folder.)

Survey of Over-age and Progress in the Dayton Schools (46 p.p.)

Medical Inspection in Dayton Schools. (In press.)







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